LED-100W-PS1-24
Switch Mode Constant Voltage LED Driver

Thomas Research Products

Rev 11-13-2017

Electrical Specifications

Input Voltage Range:	120-277 Vac Nom. (108-305Vac)
Frequency:	50/60 Hz Nom. (47-63 Hz Min/Max)
Power Factor:	>0.90 @ 80-100% load, 120V-277V
Inrush Current:	20A @ 230V
Max Input Current:	0.985A @120Vac; 0.43A @277Vac
Maximum Power:	100W
Line Regulation:	± 1%
Load Regulation:	± 2%
THD:	≤ 20% @ 80-100% load, 120V-277V
No Load Power Consumption:	< 2W
Ripple & Noise (pk-pk):	< 3%
Withstand voltage:	Input to output, 2,800Vdc, 2mA
Leakage Current:	Maximum 0.5mA at 277Vac, 60Hz input

Protections

Over-voltage	Output
Over-current	Output
Short Circuit	Auto Recovery, Hiccup mode on all

Environmental Specifications

Maximum Case Temp.	90°C
Minimum Starting Temp:	-40°C
Storage Temperature:	-40°C to +85°C
Humidity:	5% to 95%
Cooling:	Convection
Vibration Frequency:	5 to 55 Hz/2g, 30 minutes
Sound Rating:	Class A
Lifetime:	50,000 hrs @ Tc=74°C (see graph for details)
Weight:	1.1 lbs (0.5 kg)

Constant Voltage Models

Part	Model	Output Voltage (Vdc ±5%)	Output Current Range (mA)	Max. Output Power (W)	Typical Efficiency
93057477 •	LED100WPS1-24 •	24	0-4150	100	88%

• Indicates S.A.M. Class 2: US/Canada

- Total Power: 100 Watts
- Constant Voltage with Isolation
- Input Voltage: 120-277 Vac Nom.
- UL Dry & Damp Location Rated
- UL Type HL Rated for Hazardous Locations
- UL Sign Components Manual (S.A.M.)
- White Steel Case
- 5 year warranty
- UPDATED TO UL CLASS P

Safety Cert.	Standard
UL/CUL	UL8750, UL879, CAN/CSA-22.2 No. 250.13-12
CE	EN61347-1, EN61347-2-13
EMC Standard	**Notes**
FCC, 47CFR Part 15	ANSI C63.4:2009 Class B (Consumer Limit)
EN61000-3-2	Harmonic Current Emissions Class C

Note:
LED drivers are designed and intended to operate LED loads only. Non-LED loading may be outside the specified design limits of our LED drivers, and therefore cannot be covered by any warranty. If you desire to use our LED drivers to operate non-LED loads please contact us to discuss compatibility.

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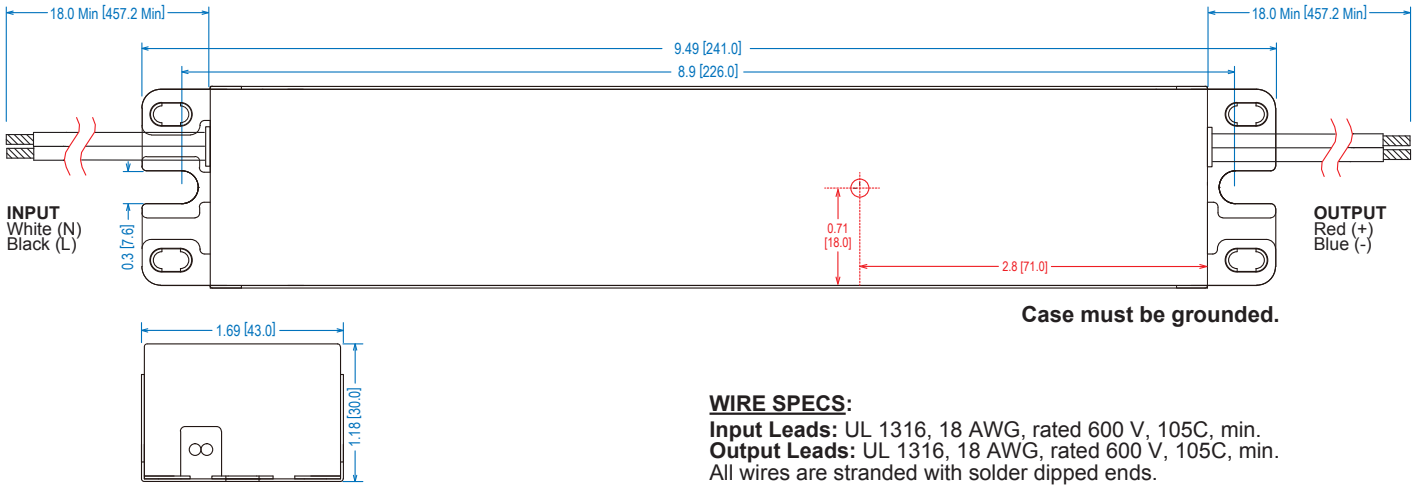
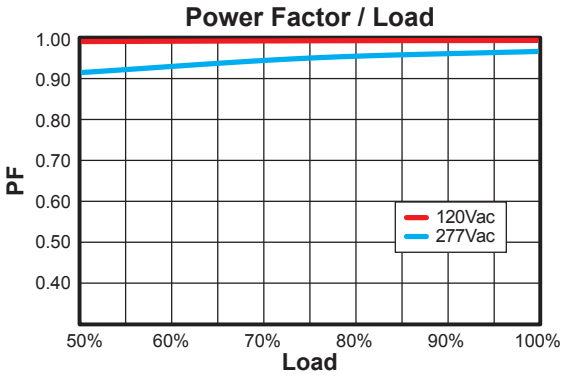
Dimensions

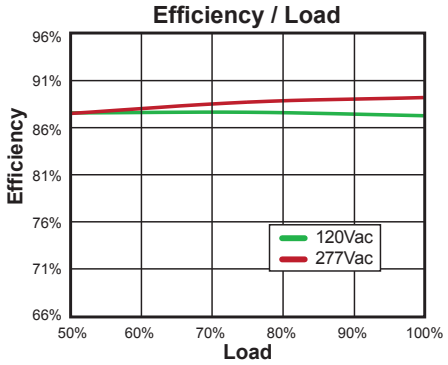
IN [mm]

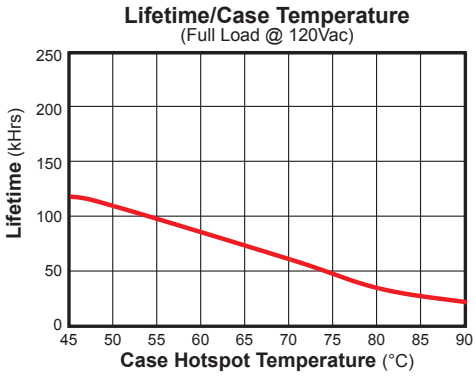


WIRE SPECS:
Input Leads: UL 1316, 18 AWG, rated 600 V, 105C, min.
Output Leads: UL 1316, 18 AWG, rated 600 V, 105C, min.
All wires are stranded with solder dipped ends.

Power Characteristics







PRODUCT NOTES:
- Rev A: UL Recognized for US and Canda
- Rev B: UL Listed for US and Canda, 5/2017

***Note**: The area under the life-temperature curve represents where the driver has highly reliable operation within specification. Driver performance may drift out of published specifications as the hours of operation exceed the curve at a given temperature. Higher operating temperatures increase the chances of a failure to function. Other electrical, mechanical and environmental factors affect driver lifetime but are not represented in this calculation.*

UL Conditions of Acceptability

See website for additional information